CONSOLIDATED INFORMATION TECHNOLOGY SERVICES TASK ASSIGNMENT (TA)

1. **TITLE:** (E403) SACD System Administration

TA No:	RA001-Rev10
Task Area Monitor:	**Alternate Task Area Monitor:** None
NASA POC: None	**Software Control Class:** Low Control
Type of Task:	Recurring Task

2. **BACKGROUND**

Systems Analysis and Concepts Directorate (SACD) requires full-time system administration to maintain the interoperability of the computer hardware and software and also to assist in the utilization and improve the effectiveness of SACD collaborative facilities by Langley engineers. SACD computers consist of a heterogeneous network of UNIX workstations and servers, Linux desktops & clusters, desktop macs and PCs, and advanced visualization systems at LaRC. Software includes various commercial analysis codes, CAD/CAM, graphics software packages and in-house software, as well as license managers, compilers and software developer utilities. On-site system administration for hardware and software is required to maintain network security and resource availability for NASA personnel, contractors, and grantees, within and outside the Langley network domain.

3. **OBJECTIVE**

The objective of the Administrators is to maintain the engineering desktop/workstation computer systems and associated servers to make sure they function safely and efficiently with SACD computer engineering facilities, and provide system administration support for the Systems Analysis and Concepts Directorate.

Administrative knowledge of current Windows operating systems and domains and MAC OS X or higher is required. Administrative knowledge of Linux and Unix Operating Systems and clusters and their associated hardware is required as well as a working knowledge of HTML and Intranet technologies. The administrators must be able to recommend and quickly implement innovative solutions to respond to a rapidly changing analytical environment.

4. **GENERAL IT SUPPORT SERVICES**

Services Specified Through Exhibit A:
Services will include: System Administration, IT Security Administration, System Software Management, Applications Management, Customer Support, and IT Consultation.

Refer to Exhibit A, Inventory of Equipment and Software defines the required General IT

Support Services.

The services of System and IT Security Administration shall be provided for those systems for which "System and IT Security Administration Required" is checked in Exhibit A. The level of security shall be consistent with the information category identified by the code checked for each such system (see NPG 2810.1). If these services are not required for the system as a whole, they shall be provided for any isolated processors where the information category code is entered in the SSA column.

Any system software, application software, or database software that is licensed to run on a particular item of equipment is entered in the respective column for that item. Software that does not require a license is also included if it is relevant to any of the required services.

The services of Hardware Maintenance (HM), System Software Management (SSM), Applications Management (AM), and Database Administration (DBA), are required for the items of equipment or software that are checked in the respective columns of Exhibit A.

Customer Support and IT Consultation and Training:
The Contractor shall provide the basic level of Customer Support and IT Consultation and Training given in Sections 4.7 and 4.8 of the SOW for all General IT Support Services. The contractor shall maintain the end-user documentation accessible to the user through the CEC web page.

Exceptions and Additional Requirements:
For systems that are covered under vendor or third-party hardware or software maintenance contract quotes for replacement parts will be obtained from vendor or third-party sources and provided to NASA Technical Monitor for procurement. A list of replacement items (ex. projector bulbs) critical to the operation of the commputer facility shall be identified and stored on-site by the contractor.

Contractor shall assist the Government in coordination of construction of new computer facilities and relocation of computer equipment.

On-site office space in SACD shall be available for use by Contractor personnel. Computer systems shall be set up to operate 24 hours per day, 7 days per week. When requested in advance, operations shall be monitored outside of normal working hours and problems shall be reported to designated persons who shall respond and initiate correction of the problem.

Contractor personnel shall document system administrator procedures.

General IT Support Services Performance Metrics
<u>Performance Standard</u>: Response to requests for help is given within Four hours. Customer requests are tracked and appropriate expert advice is sought when needed. Appropriate and correct advice is given
<u>Performance Metrics</u>:

       Exceeds: "Meets" and customers rate service as very-good to excellent.

       Meets: Response to requests for help is given within four hours. Customer requests are tracked and appropriate expert advice is sought when

needed. Customers rate service as satisfactory or better.

Fails: Customers rate service as unsatisfactory

Performance Standard: The systems to which these services apply are kept up to date with minimum disruption in capability due to upgrades. Minimum disruption is defined as an inoperable server for more than six (6) business hours.

Performance Metrics:

Exceeds: All notifications of updates or upgrades are acted upon and all approved upgrades are installed on schedule and without distuption; or "meets" and improvements to systems are recommended and adopted. Databases and systems are restored within 3 business hours of disruption.

Meets: All notifications of updates or upgrades are acted upon. All approved upgrades are installed with minor delays and disruptions. Databases and systems are restored within 6 business hours of disruption.

Fails: Any of the requirements of this section are not satisfied. Databases and systems are restored more than 6 business hours after disruption.

Performance Standard: The security of systems and data that fall under this TA is ensured.

Performance Metrics:

Exceeds: The system meets the baseline IT security requirements for the information category of the system; there are no unpatched vulnerabilities, unless the vulnerability has been mitigated by other action, accepted by line management, and approved by the LaRC IT Security Manager; security controls are followed in accordance with the IT System Security Plan for the System; any IT Security incidents are reported to the LaRC IT Security Manager and the NASA Technical Monitor within 30 minutes of incident after they are discovered; user accounts are removed by the close of business of the day that the requirement for an account is terminated and notification is received.

Meets: All baseline IT security requirements for the information category of the System are either met or have a waiver for non-compliance from the LaRC IT Security Manager; the system is up-to-date with security patches or has scheduled the installation of such patches at the completion of a test that precludes immediate installation; security controls are followed in accordance with the IT System Security Plan for the System; user accounts are removed within one week of the termination of the requirement for an account and notification is received; and any IT Security incidents are reported to the LaRC IT Security Manager within 2 hours of incident after they are discovered.

Fails: The system does not comply with the baseline IT security requirements for the information category of the System and does not have a waiver for non-compliance from the LaRC IT Security Manager; the system is not up-to-date with IT security patches; security controls are not properly followed; user accounts, for which the requirement was terminated have not been removed after a period of two weeks; the system has an IT security incident that is not reported to the LaRC IT Security Manager and the NASA Technical Monitor.

<u>Performance Standard</u>: Required documentation is complete, understandable, and up-to-date.

<u>Performance Metrics</u>:

Exceeds: Documentation is complete and up-to-date. Improvements have been made in the clarity of documentation.

Meets: Documentation is complete with only minor errors noted.

Fails: One or more required documentation components are not available or errors are noted that could compromise the operation or integrity of the systems.

<u>Performance Standard</u>: The systems software to which these services apply is fully operational and kept up-to-date with no significant disruption in capability.

<u>Performance Metrics</u>:

Exceeds: "Meets" and anomalies or inefficiencies are recognized and reported to the vendor or the availability of superior software is recognized and reported to the line manager.

Meets: Software upgrades are installed and fully operational within 5 days of receipt (or approval, if later) with no loss of data.

Fails: Any of the requirements of this subsection are not satisfied.

<u>Performance Standard</u>: The Contractor shall maintain Patchlink servers and software, keeping the operating systems and application software up to date.

<u>Performance Metrics</u>:

Exceeds: Patchlink servers are kept up to date. Suggestions are made that improves system performance.

Meets: Patchlink servers are kept up to date.

Fails: Patchlink servers are not kept up to date.

<u>Performance Standard</u>: The systems and applications to which these services apply are operated efficiently and with minimal disruption in capability due to malfunctions. Upon failure, they are repaired to minimize the disruption of capability. The integrity and security of data is maintained.

<u>Performance Metrics</u>:

Exceeds: "Meets" and: significant improvement in efficiency is noted; or a successful and rapid recovery from a malfunction or disaster has been accomplished; or the degradation of capability due to malfunctions has been significantly mitigated by system administrator actions.

Meets: Daily tuning of systems is performed. Response to problems during business hours and within 4 hours of notification. Trouble reporting system is kept current and daily follow-up of problem resolution is carried out. TAM is kept informed.

Fails: Any of the requirements of this subsection are not satisfied.

<u>Performance Standard</u>: All systems to which these services apply are maintained to OEM standards. Upon failure, they are repaired to minimize the disruption of capability. The integrity and security of data is maintained.

<u>Performance Metrics</u>:

Exceeds: "Meets" and: incipient failures are recognized and acted upon; or repairs are accomplished ahead of schedule.

Meets: Equipment failures are identified within 2 hours of occurrence (or beginning of first prime shift following occurrence) and satisfactory repairs are affected on the schedule agreed to by the contractor and line manager before the repair is initiated. Data is restored to status of the last available back-up

Fails: Any of the requirements of this subsection is not satisfied.

Performance Standard: Consultation meets customer needs. Required reports are accurate and complete

Performance Metrics:

Exceeds: Consultation and reports go beyond customer needs and are considered expert.

Meets: Consultation and reports address requirements adequately.

Fails: Consultation and reports are inaccurate and fail to meet customer needs.

Performance Standard: See Below.

Performance Metrics:

Exceeds: Performance exceeds expectations of users - customer satisfaction rated excellent.

Meets: Meets expectation of users - customer satisfaction high.

Fails: Users indicate dissatisfaction.

Performance Standard: Archiving schedules are met and systems are ready to restore databases on short notice.

Performance Metrics:

Exceeds: "Meets" and improvements in recovery procedures are recommended and adopted.

Meets: Archiving schedules are met. Semi-annual disaster recovery tests are held and confirm readiness for disaster recovery.

Fails: Either requirement of this subsection, a, b, is not satisfied.

Performance Standard: Inventory of equipment and software is up-to-date and accurate.

Performance Metrics:

Exceeds: "Meets" and: semi-annual audit finds deviations from the actual configuration of greater than 95% accuracy, or improvements have been made to the configuration management system.

Meets: Data format is satisfactory, semi-annual audit finds only minor deviations from actual configuration (85% accuracy), and tracking log is up-to-date.

Fails: Any of the requirements of this subsection are not satisfied.

Performance Standard: The contractor provides customers reasonable notification of service interruptions

Performance Metrics:

Exceeds: The contractor notifies customers of scheduled service interruptions less

than 8 business hours prior to interruption.

Meets: The contractor notifies customers of scheduled service interruptions 4-8 business hours prior to interruption.

Fails: The contractor notifies customers of scheduled service interruptions less than 4 business hours prior to interruption.

5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

None required.

6. WORK-AREA SPECIFIC SERVICES

None required.

7. Exhibit A

Exhibit A

8. SPECIAL SECURITY REQUIREMENTS

None required.

9. SOFTWARE ENGINEERING PROCESS REQUIREMENTS

None required.

10. JOINT REVIEW SCHEDULE

There will be a joint review of the work of this task at meetings to be scheduled as needed. The following persons or their alternates are required to attend: The NASA technical monitor and Contractor personnel assigned to the task. Technical performance, timeliness, cost, and staffing will be discussed. The contractor shall maintain minutes; and at the beginning of each meeting the minutes of the previous meeting will be reviewed.

11. PERIOD OF PERFORMANCE

This TA is effective from 05/01/09 to 04/27/10

12. TECHNICAL PERFORMANCE RATING

In evaluating Technical Performance, quality and timeliness shall be rated as follows:

Quality: 50%   Timeliness: 50%

13. RESPONSE REQUIREMENTS

This Task Plan shall address specific work plans; and the associated estimated labor hours, cost, and schedule.

14. GOVERNMENT ESTIMATED COST

15. FUNDING INFORMATION

Funding has not been entered for this TA.

16. MILESTONES

None required.

17. DELIVERABLES

None required.

18. FILE ATTACHMENTS

None.